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COMPLETE LISTING OF CLAIMS IN THE APPLICATION

12. (previously presented) A method for generating a new catalytic activity in an enzyme, comprising the steps of:
- a) introducing a DNA sequence coding for the enzyme into the *Escherichia coli* strain XL1-Red or into a mutationally functional derivative thereof which carries the genetic markers relA1, mutS, mutT and mutD5,
 - b) incubating the transformed *Escherichia coli* strain XL1-Red or its functional derivative to generate mutations in the DNA sequence,
 - c) transferring the mutated DNA sequence from the transformed *Escherichia coli* strain XL1-Red or its functional derivative to a microorganism which has no impeding enzyme activity which would impede detection of the new catalytic activity,
 - d) incubating this microorganism to detect the new catalytic enzyme activity in at least one selection medium which comprises at least one enzyme substrate to recognize the newly generated catalytic activity in the enzyme, with or without other indicator substances, and
 - e) selecting the microorganisms which show the newly generated catalytic activity, said microorganisms in steps c), d) and e) being a member selected from the group consisting of bacteria, fungi and yeasts,
- wherein the enzyme is selected from the group consisting of lipases, amidases, nitrilases, ether hydrolases, peroxidases, glycosidases and phytases.